

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

SEP 2 8 2012

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Richard L. Dickenson Director, Environmental Services Tate & Lyle Ingredients Americas LLC 2200 East Eldorado Street Decatur, Illinois 62525

Dear Mr. Dickenson:

This is to advise you that the U.S. Environmental Protection Agency has determined that the Tate & Lyle Ingredients Americas LLC (Tate & Lyle) facility at 2200 East Eldorado Street, Decatur, Illinois (facility) is in violation of the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq. and the associated state or local pollution control requirements. We are today issuing to you a Notice of Violation and Finding of Violation (NOV/FOV) for these violations.

The CAA requires the development of Primary and Secondary National Ambient Air Quality Standards to protect public health and welfare. To attain and maintain these standards, each state is required to develop an implementation plan. Illinois' State Implementation Plan (Illinois SIP) requires you to take reasonably available measures to prevent volatile organic compounds, nitrogen oxides, carbon monoxide, particulate matter, and hazardous air pollutants from emitting from the facility.

EPA finds that at the facility there are violations of the following:

- 1. Illinois SIP requirements. In violating the Illinois SIP requirements you are also violating Title I of the CAA and its implementing regulations, which require compliance with the terms and conditions of the Illinois SIP.
- 2. The Title V Operating Permit requirements of the CAA.
- 3. Prevention of Significant Deterioration of Air Quality permit requirements for areas in attainment of National Ambient Air Quality Standards.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Dakota Prentice. You may call him at (312) 886-6761 or email him at prentice.dakota@epa.gov if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Tate & Lyle's compliance with the requirements of the CAA.

Sincerely,

George T. Czerniak

Acting Director

Air and Radiation Division

Enclosure

cc: Ray Pilapil

Manager

Bureau of Air, Compliance and Enforcement Section

Illinois Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)	
)	
Tate & Lyle Ingredients Americas LLC)	NOTICE OF VIOLATION and
Decatur, Illinois)	FINDING OF VIOLATION
)	EPA-5-12-IL-22
Proceedings Pursuant to)	
the Clean Air Act)	
42 U.S.C. §§ 7401 et seq.	j	

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Notice of Violation and Finding of Violation (NOV/FOV) to Tate & Lyle Ingredients Americas LLC (you or Tate & Lyle) to notify you that we have found violations of the Clean Air Act, 42 U.S.C. §§ 7401-7671q (CAA or the Act), and the Illinois State Implementation Plan (SIP) at the facility located at 2200 East Eldorado Street, Decatur, Illinois 62525 (Facility). The relevant statutory and regulatory background, factual background, notice and finding of violations, and environmental impact of these violations are set forth in detail below.

This NOV/FOV is issued in accordance with Section 113(a)(1) and (a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (a)(3), which authorize the Administrator to take certain enforcement actions after notifying a person that it is in violation of the Act. The authority to issue this NOV/FOV has been delegated by the Administrator to the Regional Administrator and re-delegated to the Director of the Air and Radiation Division for Region 5 of the EPA.

Relevant Statutory and Regulatory Background

<u>Prevention of Significant Deterioration of Air Quality (PSD) Requirements</u>

- 1. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the Act require preconstruction review and permitting of stationary sources in attainment/unclassifiable areas. See 42 U.S.C. §§ 7470-7492. Pursuant to applicable regulations, if a major stationary source located in an attainment area is planning to make a major modification, then that source must obtain a PSD permit before beginning actual construction. See 40 C.F.R. § 52.21. To obtain this permit, the source must, among other things, undergo a technology review and apply Best Available Control Technology (BACT); perform a source impact analysis; perform an air quality analysis and modeling; submit appropriate information; and conduct additional impact analyses as required.
- 2. Section 165(a) of the Act, 42 U.S.C. § 7475(a) prohibits the construction and subsequent operation of a "major emitting facility" in an area designated as attainment or

- unclassifiable unless a permit has been issued that comports with the requirements of Section 165 and the facility employs BACT for each pollutant subject to regulation under the Act that is emitted from the facility.
- 3. Section 169(2)(c) of the Act, 42 U.S.C. § 7479(2)(c), defines "construction" to include "modification" (as defined in Section 111(a) of the Act). "Modification" is defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a), to be "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted."
- 4. On June 19, 1978, EPA issued regulations implementing the federal PSD program at 40 C.F.R. § 52.21. See 43 Fed. Reg. 26,388, 26, 403 (June 19, 1978) (federal PSD program). Since that time, the federal PSD regulations have been revised, with subsequent revisions incorporated under 40 C.F.R. § 52.21.
- 5. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a state implementation plan (SIP) that contains emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality in areas designated as attainment or unclassifiable.
- 6. A state may comply with Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, by having its own PSD regulations, which must be at least as stringent as those set forth at 40 C.F.R. § 51.166, approved by EPA as part of its SIP. If a state does not have a PSD program that has been approved by EPA and incorporated into its SIP, the federal PSD regulations set forth at 40 C.F.R. § 52.21 may be incorporated by reference into the SIP. 40 C.F.R. § 52.21(a).
- 7. On August 7, 1980, EPA disapproved Illinois' proposed PSD program and then incorporated by reference the PSD regulations of 40 C.F.R. § 52.21(b) through (w) into the Illinois SIP. 40 C.F.R. § 52.738 and 45 Fed. Reg. 52676, 52741 (Aug. 7, 1980). The federal PSD regulations appearing at 40 C.F.R. § 52.21 are still incorporated into and part of the Illinois SIP. On December 24, 2003, EPA issued a final rule incorporating newly promulgated paragraphs of the New Source Review (NSR) Reform rule, which includes revisions to the federal PSD program, into the Illinois SIP. 68 Fed. Reg. 74489 (Dec. 24, 2003).
- 8. No new major stationary source or major modification to which the requirements of 40 C.F.R. § 52.21(j) through (r)(5), PSD requirements, apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. 40 C.F.R. § 52.21(a)(2)(iii)
- 9. The requirements of 40 C.F.R. § 52.21(j) through (r) apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides. 40 C.F.R. § 52.21(a)(2)(ii)

- 10. "Major Stationary Source" for the purpose of PSD means any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant. 40 C.F.R. § 52.21(b)(1)(i)(b)
- 11. "Regulated New Source Review (NSR) pollutant" means any pollutant for which a national ambient air quality standard has been promulgated. 40 C.F.R. § 52.21(b)(50)(i)
- 12. National ambient air quality standards for particulate matter were originally promulgated on July 1, 1987 and have been updated since that date. 40 C.F.R. §§ 50.6 and 50.7
- 13. "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant from the major stationary source. 40 C.F.R. § 52.21(b)(2)(i)
- 14. "Net emissions increase" means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

 (a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to 40 C.F.R. § 52.21(a)(2)(iv); and (b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. 40 C.F.R. § 52.21(b)(3)(i)
- 15. "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant. 40 C.F.R. § 52.21(b)(40)
- 16. "Significant" means, in reference to a net emissions increase or the potential of a source to emit a rate of emissions that would equal or exceed any of the following rates: PM, 25 tons/yr; PM10, 15 tons/yr; and PM2.5, 10 tons/yr. 40 C.F.R § 52.21(b)(23)(i)

Title V Requirements

- 17. Title V of the Act, 42 U.S.C. §§ 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d) of the Act, 42 U.S.C. § 7661a(d), provides that each state must submit to the EPA a permit program meeting the requirements of Title V.
- 18. In accordance with Section 502(b) of the Act, 42 U.S.C. § 7661a(b), the EPA promulgated regulations implementing Title V of the Act. *See* 57 Fed. Reg. 32295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.
- 19. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit.
- 20. 40 C.F.R. § 70.6(b)(1) provides that Title V permits are federally enforceable and that all terms and conditions in a Title V permit are enforceable by the EPA.

- 21. 40 C.F.R § 70.2 defines "major source" as, among other things, any stationary source that directly emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation.
- 22. 40 C.F.R. § 70.1(b) provides that "All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements."
- 23. 40 C.F.R. § 70.2 defines "applicable requirement" to include "(1) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements of the Act, including revisions to that plan promulgated in Part 52 of this chapter..."
- 24. 40 C.F.R. § 70.5(b) provides that: "Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to the release of a draft permit."
- 25. EPA gave interim approval of Illinois' Title V program on March 7, 1995. 60 Fed. Reg. 12478. EPA fully approved the Illinois Title V program on December 4, 2001. 66 Fed. Reg. 62946. The approved Illinois Title V program is known as the Illinois Clean Air Act Permit Program (CAAPP).

Illinois Environmental Protection Agency Construction Permits

- 26. Under 40 C.F.R. § 52.23, any permit limitation or condition contained within a permit issued under an EPA-approved program that is incorporated in a SIP, is a requirement of the SIP, and is federally enforceable under Section 113, 42 U.S.C. § 7413.
- 27. EPA promulgated approval of 35 Illinois Administrative Code (IAC) Part 201, "Permits and General Conditions," as part of the federally enforceable SIP for the State of Illinois on May 31, 1972. See 37 Fed. Reg. 10862. Since then, EPA has approved several revisions of 35 IAC Part 201 into the federally enforceable SIP.

Standards for PM Emissions

- 28. EPA approved the Illinois rules for Particulate Emissions from Process Emission Sources at 35 IAC Part 212, Subpart L as the federally enforceable Illinois SIP on February 21, 1980. 45 Fed. Reg. 11493
- 29. Among the rules approved in this action was 35 IAC 212.321, which limits the emission of PM based on the process weight rate of a specific process emission source.

Relevant Factual Background

30. Tate & Lyle is a corporation that does business in Illinois.

- 31. Tate & Lyle is a "person" as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
- 32. Tate & Lyle owns and operates a grain processing facility located at 2200 East Eldorado Street in Decatur, Illinois (Decatur Plant or Facility)
- 33. At all times relevant to this Notice and Finding of Violation, Tate & Lyle owned and operated emissions units at its Decatur Plant.
- 34. Tate & Lyle's Decatur Plant is located in Macon County, Illinois, which at all times relevant to this Notice was classified as attainment for PM and PM₁₀.
- 35. Tate & Lyle's Decatur Plant is a major source of PM and PM₁₀ as defined by 40 C.F.R. § 70.2 and 40 C.F.R. § 52.21(b)(1)(i)(b).
- 36. A Soda Ash Neutralization System, was constructed at the Decatur Plant in August 1988 and began operation in November 1988. It is identified as Emission Unit 111-14.

Tate & Lyle's Title V Permit

- 37. The Illinois Environmental Protection Agency (IEPA) issued a CAAPP Permit, Application No.: 96020099 (Title V Permit), to the Facility (listed as A. E. Staley Manufacturing Company) on August 12, 2003.
- 38. Pursuant to Condition 9.14 of the Title V Permit, the terms and conditions of the Title V Permit remain in effect until the issuance of a renewal permit.
- 39. Condition 5.1.1. of the Title V Permit states that the permit is issued based on the source requiring a CAAPP Permit as a major source of VOM, NO_x, SO₂, PM₁₀, CO, and HAP emissions.
- 40. The Title V Permit contains PM/PM₁₀ emission limits for the soda ash neutralization system, the packed tower scrubber (emission unit 111-14A) and the catenary grid scrubber (emission unit 111-14B).
- 41. The permit provides that emission unit 111-14A has a PM/PM10 emission limit of 0.11 lb/hr and 0.46 tons/yr. The permit provides that emission unit 111-14B has a PM/PM10 emission limit of 0.04 lb/hr and 0.18 tons/yr.

Tate & Lyle's Construction Permit

- 42. In 2004, Tate and Lyle applied for a construction permit to install a new venturi and packed column scrubber system (Venturi Scrubber System).
- 43. The IEPA issued a Construction Permit for a Venturi Scrubber System, Application No.: 04050013 (Construction Permit), to the Facility (listed as A. E. Staley Manufacturing Company) on September 22, 2004.

- 44. The Venturi Scrubber System, emission unit 111-14, was installed in or around 2004 and replaced the existing packed tower scrubber and catenary grid scrubber (Emission Units 111-14A and 111-14B).
- 45. The Construction Permit replaced Emission Units 111-14A and 111-14B from the Title V Permit with Emission Unit 111-14.
- 46. Construction Permit condition 6.a states the PM/PM₁₀ emissions from Emission Unit 111-14 shall not exceed 1.0 lbs/hr or 4.4 tons/yr.
- 47. Construction Permit condition 6.a states the HCl (hydrogen chloride or hydrochloric acid) emissions from Emission Unit 111-14 shall not exceed 0.45 lbs/hr or 2.0 tons/yr.
- 48. The Construction Permit includes language on page seven, which states that the Permittee is allowed to operate the affected units under the construction permit until the Title V Permit is next reissued.

Title V Permit Renewal Application

- 49. Tate & Lyle submitted a Title V Permit Renewal Application to IEPA, dated October 2007.
- 50. IEPA has not issued a renewed Title V Permit in response to Tate & Lyle's renewal application.
- 51. The Title V Permit Renewal Application states that the actual PM emission rate from Emission Unit 111-14 is 0.26 lbs/hr and 1.14 tons/yr and that the allowable emission rate is 4.77 lbs/hr. The application states that the allowable emission rate was set andt based on 35 IAC 212.321.
- 52. The Title V Permit Renewal Application states that the actual HCl emission rate from Emission Unit 111-14 is 0.17 lbs/hr and 0.76 tons/yr and the allowable emission rate is 0.45 lbs/hr and 2.0 tons/yr.

VICO Reliability Project Construction Permit

- 53. In January 2011, Tate & Lyle conducted a stack test at Emission Unit 111-14 using Method 5, Method 202 and Conditional Method 027.
- 54. This test identified an average emission rate for PM of 14.01 lbs/hr and an average emission rate for HCl of 0.81 lbs/hr.
- 55. The annual emissions at this rate are 102.27 tons/yr of PM and 5.91 tons/yr of HCl when utilizing the same hours of operation as the information presented in paragraphs 59 and 60 this NOV/FOV.

- 56. Tate & Lyle submitted a construction permit application to IEPA, dated October 2011, titled "Vico Reliability Project Construction Permit Application for a Proposed Project at A CAAPP Source" (VICO Reliability Construction Permit Application).
- 57. This construction permit application states the purpose of the modification is to decrease downtime caused by mechanical issues.
- 58. The VICO Reliability Construction Permit Application included, among other modifications, the addition of a wet electrostatic precipitator (WESP) at Emission Unit 111-14 for control of particulate matter.
- Table 4 of the VICO Reliability Construction Permit Application states that the potential PM/PM₁₀ emissions prior to WESP addition are 11.83 lbs/hr and 86.33 tons/yr.
- 60. Table 4 of the VICO Reliability Construction Permit states that the allowable HCl emissions are 0.529 lbs/hr and 3.86 tons/yr.

Violations

- When Tate & Lyle modified Emission Unit 111-14A and 111-14B in or around 2004 by replacing these two scrubbers with one new venturi and packed column scrubber, the modifications caused a significant net emissions increase of PM from the Soda Ash Neutralization System.
- 62. The modifications performed in or around 2004 constitute the construction of a major modification within the meaning of the Act and the Illinois SIP for PM.
- 63. Tate & Lyle violated and continues to violate Section 165 of the Act, 42 U.S.C. § 7475, 40 C.F.R. § 52.21, and the Illinois SIP by constructing major modifications to an existing major source without applying for or obtaining PSD permits and operating the modified facilities without installing BACT.
- 64. Tate & Lyle violated 40 C.F.R. § 70.5(b) by not providing corrected information to IEPA regarding the Title V Permit Renewal Application following the 2011 stack test at Emission Unit 111-14.
- 65. Tate & Lyle has been continuously violating the allowable PM allowable emission rate in the Illinois SIP as calculated from 35 IAC 212.321, since approximately 2004.
- 66. Tate & Lyle has been continuously violating Construction Permit condition 6.a for the emission rate of PM/PM₁₀, since approximately 2004.
- 67. Tate & Lyle has been continuously violating Construction Permit condition 6.a for the emission rate of HCl since, approximately 2004.

Environmental Impact of Violations

68. These violations have caused excess emissions of PM and HCl.

<u>Particulate Matter</u>: Particulate matter, especially fine particulates contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:

- irritation of the airways, coughing, and difficulty breathing;
- decreased lung function;
- aggravated asthma;
- chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

<u>Hydrochloric Acid</u>: Hydrochloric acid is associated with a variety of adverse health effects. These adverse health effects include chronic health disorders (e.g., effects on the central nervous system, blood, and heart) and acute health disorders (e.g., irritation of eyes, throat, and mucous membranes and damage to the liver and kidneys).

9/28/n

George T. Czemiak Acting Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-12-IL-22, by Certified Mail, Return Receipt Requested, to:

Richard L. Dickenson Director, Environmental Services Tate & Lyle Ingredients Americas LLC 2200 East Eldorado Street Decatur, Illinois 62525

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Ray Pilapil, Manager Bureau of Air, Compliance and Enforcement Section Illinois Environmental Protection Agency P.O. Box 19506 Springfield, Illinois 62794

on the day of October 2012.

Doretta Shaffer

Administrative Program Assistant

AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 7667 4751